## IN THE CLAIMS

Please amend the claims as follows:

- 1. (original) A method of modelling a state machine, comprising detecting if, from a state, an event gives rise to non-determinism and, if it does, generating a world for at least some of the permutations, and processing the event in each of the worlds.
- 2. (original) A method as claimed in claim 1, comprising, following processing of the event, identifying identical worlds and disregarding all except one of the identical worlds.
- 3. (currently amended) A method as claimed in either preceding elaimclaim 1, further comprising processing a further event in all of the extant worlds.
- 4. (currently amended) A method as claimed in any preceding elaimclaim 1, in which the generating step comprises permuting or taking a selection of permutations of set-actions.
- 5. (currently amended) A method as claimed in any preceding elaimclaim 1, in which the generating step comprises permuting or

taking a selection of permutations of set-meta-events.

- 6. (currently amended) A method as claimed in any preceding claimclaim 1, comprising receiving a request for information on the state model from an external program, and responding to the request with the requested information.
- 7. (currently amended) A method as claimed in any preceding elaimclaim 1, comprising receiving an instruction to process an event, and processing the event in response thereto.
- 8. (currently amended) A method as claimed in any preceding elaimclaim 1, comprising receiving an instruction to eliminate a world for each of one or more non-deterministic branches, and in response thereto eliminating the specified world or worlds.
- 9. (currently amended) A method as claimed in any preceding claimclaim 1, comprising receiving an instruction to refrain from generating a world for one or more non-deterministic branches, and in response thereto refraining from generating the specified branch or branches.
- 10. (currently amended) A computer program containing

instructions for a computer to carry out the method of any of claims 1 to 9 claim 1.

- 11. (original) A computer programmed with the computer program of claim 10.
- 12. (original) Apparatus for modelling a state machine, the apparatus comprising means for detecting if, from a state, an event gives rise to non-determinism and, means responsive to a positive determination for generating a world for at least some of the permutations, and means for processing the event in each of the worlds.
- 13. (original) Apparatus as claimed in claim 12, comprising means arranged following processing of the event for identifying identical worlds and for disregarding all except one of the identical worlds.
- 14. (currently amended) Apparatus as claimed in claim 12—or claim 13, comprising means for processing a further event in all of the extant worlds.
- 15. (currently amended) Apparatus as claimed in any of claims 12

to 14 claim 12, in which the world generating means comprises means for permuting or taking a selection of permutations of set-actions.

- 16. (currently amended) Apparatus as claimed in any of claims 12 to 15 claim 12, in which the world generating means comprises means for permuting or taking a selection of permutations of set-meta-events.
- 17. (currently amended) Apparatus as claimed in any of claims 12 to 16claim 12, comprising means for responding to a request from an external program for information on the state model with the requested information.
- 18. (currently amended) Apparatus as claimed in any of claims 12 to 17claim 12, comprising means responsive to an event-processing instruction for processing an event.

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